

WHAT IS CLAIMED IS:

1. A method of inspecting a target object to be inspected, comprising the steps of:

bringing about a fritting phenomenon in a part of  
5 the insulating film formed on an inspection electrode of the target object to be inspected so as to break a part of the insulating film;

bringing an inspecting probe into electrical contact with the surface of a part of the inspection  
10 electrode, the insulating film of the part of the inspection electrode having been broken by the fritting phenomenon; and

inspecting the electrical characteristics of the target object by using a tester connected to the  
15 inspecting probe.

2. The inspection method according to claim 1, wherein said step of breaking a part of the insulating film comprises the steps of:

bringing a probe into contact with the inspection  
20 electrode of the target object to be inspected; and

applying a voltage between the probe and the inspection electrode so as to bring about the fritting phenomenon in the insulating film formed on the surface of the inspection electrode.

25 3. The inspection method according to claim 1, wherein said step of breaking a part of the insulating film comprises the steps of:

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electrode.

10. The inspection apparatus according to claim 8,  
wherein said current limiter for forming a  
predetermined potential gradient in at least a part of  
5 the insulating film comprises:

a first probe and a second probe each brought into  
contact with the inspection electrode of the target  
object to be inspected; and

10 a power source circuit for applying a voltage  
between the first probe and the second probe, said  
voltage serving to bring about a fritting phenomenon in  
the insulating film formed on the surface of the  
inspection electrode.

11. The inspection apparatus according to  
15 claim 10, wherein at least one of the first probe and  
the second probe is formed of at least one material  
selected from the group consisting of tungsten,  
palladium and a beryllium-copper alloy.

12. The inspection apparatus according to claim 8,  
20 further comprising a controller for controlling the  
power source circuit, and a communication circuit for  
connecting the controller to the tester.

13. The inspection apparatus according to  
claim 12, wherein said means for forming a  
25 predetermined potential gradient in at least a part of  
the insulating film is incorporated in the tester.

14. The inspection apparatus according to

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claim 13, wherein said current limiter for limiting the current flowing between the probe and the inspection electrode is incorporated in the tester.

15. The inspection apparatus according to claim 13, wherein said power source circuit for forming a predetermined potential gradient in at least a part of the insulating film comprises:

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10 a first probe and a second probe, which are brought into contact with the inspection electrode of the target object to be inspected; and

a power source for applying a voltage between the first probe and the second probe, said voltage serving to bring about a fritting phenomenon in the insulating film formed on the surface of the inspection electrode.